

VP Ellipsis is Not Licensed by VP Topicalization

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Based on the observation that the constraints on VP ellipsis (VPE) closely match those on VP topicalization, Johnson (2001) proposes a movement account for VPE: in order for a VP to be deleted, it first has to undergo topicalization. Our paper shows that, although attractive, making VPE dependent on VP topicalization is problematic because VPE and VP topicalization are not distributionally equivalent. While VP topicalization targets the left periphery and consequently is subjected to constraints on movement, VPE is not so restricted. The paper outlines some alternatives for capturing the observed parallelism in the licensing of VP topicalization and VPE.

Keywords:

VP Ellipsis, VP topicalization, left periphery, Main Clause Phenomena, ellipsis licensing, restrictions on movement

1 Introduction: Aim and Scope of the Paper

The phenomenon of English VP ellipsis (VPE) has been widely studied in the generative literature (Zagona 1988a,b; Lobeck 1995; Johnson 2001; Kim 2003). It has been noted that the contexts in which VPE is allowed are constrained in two ways: (i) the content of the ellipsis site has to be recoverable from the discourse (Johnson 2001 for a survey), and (ii) the ellipsis site has to be syntactically licensed (Zagona 1988a,b; Saito and Murasugi 1990; Lobeck 1995, 1999). We shall not be concerned with the former constraint, but focus exclusively on the latter. Early discussion of the descriptive generalizations that will be the focus of the discussion are to be found in Bresnan (1976), and especially Lobeck (1995). The examples in (1) show that English VP ellipsis depends on the availability of an auxiliary as its licenser (see Lobeck 1995: 141-163, and also Zagona 1988a; Johnson 2001). VPE is also licensed by infinitival *to*, cf. (1d,e,f).¹

- (1)
- a. Jane doesn't eat rutabagas and Holly doesn't \emptyset either.
 - b. Jane wouldn't eat rutabagas and Holly wouldn't \emptyset either.
 - c. Jane hasn't eaten any rutabagas and Holly hasn't \emptyset either.
 - d. John is considering eating rutabagas and Holly definitely wants to \emptyset .
 - e. Mag Wildwood wants to read Fred's story, and I also want to \emptyset .
(Johnson 2001: 440 (his 5d)).
 - f. John wants to go on vacation, but he doesn't know when to \emptyset .
(Johnson 2001: 441 (his (9a), from Zagana (1988a) (21): 101)

In the absence of such licensing heads, VP ellipsis is illicit: a finite lexical verb such as *started* cannot license VPE in the absence of infinitival *to*, as (2c-d) illustrate:

- (2)
- a. I can't believe Holly Golightly won't eat rutabagas.
 - a. I can't believe Fred won't \emptyset , either.
 - b. * I can't believe Fred \emptyset , either. (Johnson 2001: 439 (his (4))
 - c. * Sally Tomato started running down the street, but only after José started \emptyset .
(Johnson 2001: 440 (his (7))
 - d. Sally Tomato started running down the street, but only after José started to \emptyset .

For a survey of the analyses put forward to account for the restrictions on VPE, we refer to the discussion in Johnson (2001) and also more recently in Aelbrecht (2010a).

In this paper we evaluate the at first sight attractive proposal elaborated in Johnson (2001) which capitalizes on the parallelisms between VPE and VP topicalization. Based on the observation that the syntactic constraints on VPE closely match those on VP topicalization, Johnson proposes a movement account for VPE: in order for a VP to be deleted, it first has to undergo topicalization.

Our paper is organized as follows: section 2 provides a survey of the similarities between the licensing of VPE and VP topicalization, which form the basis for Johnson's movement account. Section 3 discusses problems for the movement account: it is shown that VPE is available in a range of contexts in which VP topicalization is unacceptable. Section 4 presents some alternative accounts that link the licensing of VPE to VP movement in different

ways. We also outline one way in which Merchant's (2001) account of ellipsis licensing using an ellipsis feature can be adapted to capture the parallelisms. Section 5 is a brief conclusion.

2 VP Ellipsis as VP Topicalization: Johnson 2001

In this section we summarize Johnson's (2001) approach according to which VPE is derived through VP topicalization. He shows that the licensing condition on VPE displays striking parallelisms with the licensing conditions on the trace/copy of VP topicalization (see his paper, Kim 2003 and Authier 2011 for extensive references).² This is illustrated by the contrasts between (3) and (4).³ As was the case for VPE, VP topicalization is licensed by an auxiliary, and by infinitival *to*, cf. (3). In the absence of such a licensing head, VP topicalization is not allowed, cf. (4).

(3) Madame Spanella claimed that...

- a. *eat rutabagas*, Holly wouldn't *t*.
- b. *eaten rutabagas*, Holly hasn't *t*.
- c. *eating rutabagas*, Holly should be *t*.
- d. *eat rutabagas*, Holly wants to *t*. (Johnson 2001: 444, his (17))

(4) Madame Spanella claimed that...

- a. * *would eat rutabagas*, Holly *t*.
- b. * *hasn't eaten rutabagas*, Holly *t*.
- c. ?* *eating rutabagas*, Holly started *t*. (Johnson 2001: 444, his (18))⁴

Johnson concludes "this is a pretty close fit, and it encourages thinking of the licensing condition on (VP) Ellipsis in terms of the licensing condition on traces" (2001: 444).^{5,6} To account for the parallelism Johnson proposes that the syntax of VPE be partly assimilated to the syntax of VP topicalization. He argues that 'for a VP to elide, it must first topicalize' (2001: 446) and says that "[t]his proposal, then, gives VP Ellipsis an analysis parallel to the Topic Drop phenomenon that Huang (1984), among others, discusses" (2001: 447).⁷

As a consequence of this analysis, the VPE site is in fact the trace/copy of a moved VP and it will thus be syntactically licensed under the conditions that govern the licensing of

copies/traces. Based on the observations in Lobeck (1995: 165-191), Johnson (2001) argues that VPE under infinitival *to*, cf. (5) and (6), provides further evidence for this proposal. In adjunct (5a) or subject (5b) infinitivals and in infinitival complements of N (5c,d,e), VPE is unacceptable,⁸ in indirect questions (5f) its status varies, and in complement clauses VPE (6) is grammatical:

- (5) a. * Mag Wildwood came to read Fred's story, and I also came to Ø.
 b. * You shouldn't play with rifles because to Ø is dangerous.⁹
 (Johnson 2001: 445, (22a,b))
 c. * Lulamae Barnes recounted a story to remember because Holly had also recounted a story to Ø. (Johnson 2001: 445, (24b))
 d. ?* Madame Spanella questioned Mag's desire to eat rutabagas, but only after I had questioned Sally's desire to Ø. (Johnson 2001: 445, (24c))
 e. ?* Sally explained the attempt to arrest Holly, but only after I had denied the decision to Ø. (Johnson 2001: 445, (24d))
 f. ?? Ron wanted to wear a tuxedo to the party, but Caspar couldn't decide whether to Ø. (Johnson 2001: 445, (22c))
- (6) a. Mag Wildwood wants to read Fred's story, and I also want to Ø.
 b. You shouldn't play with rifles because it's dangerous to Ø.
 c. It's possible for you to play with rifles, and it's possible for me to Ø too.
 (Johnson 2001: 445, (23))

If VPE is derived through VP movement, VPE is predicted to be illicit in the same contexts in which VP movement is illicit. Johnson's data in (5) and (6) follow from a movement analysis of VPE because the contexts in (5) which are seen to be incompatible with VPE are syntactic islands (see Sag 1976, however; cf. section 3 below). On the movement derivation of VPE, the unacceptability of the examples in (5) is then parallel to that in (7) in which VP topicalization has illicitly extracted the VP from an island. These observations are also in line with the interpretation of VPE as Topic Drop, which is also derived by movement of a constituent to the left periphery. Raposo (1986: 381-384) shows that Topic Drop in European Portuguese is sensitive to islands.¹⁰

- (7) a. * You shouldn't play with rifles because [play with rifles] to *t* is dangerous.
(Johnson 2001: 447, (29a))
- b. * Lulamae Barnes recounted a story to remember because [remember] Holly had recounted a story to *t*. (Johnson 2001: 447, (29c))
- c. ?* Madame Spanella questioned Mag's desire to eat rutabagas, but only after [eat rutabagas] I had questioned Sally's desire to *t*.¹¹
- d. ?* Sally explained the attempt to arrest Holly, but only after [arrest Holly] I had denied the decision to *t*.
- e. ?? Ron wanted to wear a tuxedo to the party, but [wear a tuxedo to the party] Caspar couldn't decide whether to *t*. (Johnson 2001: 447, (29b))

Johnson concludes:

So the island effects we've seen for VPs elided in infinitival clauses can now be traced back to the fact that VPs in infinitival clauses are forced to move out of that infinitival clause, and this movement is subject to island constraints. Moreover, the somewhat variable effects that we have seen in indirect questions – [...] – might be traced back to the fact that the *wh*-island constraint is itself quite variable. (Johnson 2001: 447)

Observe that for (7b,c,d) there is no landing site for the moved VP inside the infinitival clause, as shown in (8). This is so because, to quote Johnson (2001: 446): 'topicalized VPs cannot land inside an infinitival clause in the way that they can in finite clauses', as in (9):¹²

- (8) a. * Lulamae Barnes recounted a story to remember because Holly had recounted a story [remember] to *t*.
- b. ?* Madame Spanella questioned Mag's desire to eat rutabagas, but only after I had questioned Sally's desire [eat rutabagas] to *t*.
- c. ?* Sally explained the attempt to arrest Holly, but only after I had denied the decision [arrest Holly] to *t*.
- (9) a. ? Lulamae decided that *eating rutabagas*, she should be *t*.
- b. * Lulamae decided *eating rutabagas*, to be *t*. (Johnson 2001: 446, (27a,b))

Johnson does point out that, as it stands, the movement analysis does not fully cover the data. For instance, the role of negation in rendering VPE acceptable (cf. (10)) goes unaccounted for

(see note 10) and the analysis does not predict the ungrammaticality of VPE in the complement of *being* (see (11), see Bresnan 1976 for this observation):

- (10) a. Mag Wildwood came to introduce the barkeep but I came (precisely) not to Ø.
 b. You should unload rifles because not to Ø is dangerous.
 c. If Ron knows whether to wear a tuxedo, and Caspar knows whether not to Ø, do they know different things?
 d. Lulamae recounted a story to remember because Holly had recounted a story not to Ø. (Johnson 2001: 447, (30))
- (11) a. * Doc Golightly is being discussed and Sally is being Ø too.
 b. * I remember Doc being discussed, but you recall Sally being Ø.
 (Johnson 2001: 442 (his 12b))

In the next section we raise some additional problems for the movement derivation of VPE which cast doubt on its viability.¹³

3 VP Ellipsis vs. VP Topicalization:

If VPE is to be derived by VP topicalization, then, following the logic of Johnson's own discussion of VPE in the context of infinitival clauses (cf. (5)-(7) above), we would expect VPE to be unacceptable in all contexts in which VP topicalization is disallowed, since the latter feeds the former. Put differently, contexts incompatible with VP topicalization are predicted to be incompatible with VPE. We will show that this prediction is incorrect, illustrating a range of contexts in English in which (VP) topicalization is illicit and in which VPE remains perfectly acceptable.

We first discuss island (in)sensitivity in both VP topicalization and VP ellipsis: the descriptive generalization there is that where VP movement out of an island is illicit, VPE is fully acceptable inside the island. Next, we look at (VP) topicalization *within* certain clauses and we show that, although there are clauses where such movement is not possible, VPE is still perfectly acceptable.

3.1 Island (In)sensitivity

As said, topicalization cannot extract a constituent from an island.¹⁴ As shown in (12), topic extraction from a *wh*-islands is ungrammatical:

- (12) a. * I know that one of my students presented Johnson's article about VPE in my class but [that article], I cannot remember [which of my students presented *t*].
 b. * I know that some students presented Johnson's article about VPE in my class but [that article], I cannot remember the students [who presented *t*].

In the same way, VP topicalization cannot extract a VP from such islands:

- (13) a. * I knew that some students presented this article in my class but [present the article] I couldn't recall [which of the students didn't *t*].
 b. * I know that some students presented this article in my class but [present the article] I can't recall the students [who didn't *t*].

However, VPE is unproblematic in *wh*-islands, as was also noted in Sag (1976):¹⁵

- (14) a. I knew that some students presented this article in my class but I couldn't recall [which of the students didn't \emptyset].
 b. I know that some students presented this article in my class but I can't recall the students [who didn't \emptyset].

The same holds in other types of syntactic islands, such as the complex DP island in (15). Here, the nominal head takes a clausal complement, which constitutes a strong island for argument topicalization (15a). Again, VP topicalization is also unacceptable (15b), as expected, but VPE is acceptable (15c):

- (15) a. * [This article] he made [the claim that he had elaborated *t* on his own].
 b. * [Elaborate the analysis on his own] he made [the claim that he did *t*].
 c. He made [the claim that he did \emptyset].

3.2 Topicalization Within Certain Clauses

3.2.1 Topicalization Inside a Wh-Clause

A first type of clause in which VP topicalization is illicit in English could be broadly defined in terms of the domain of wh-extraction (see Emonds 1976 for the data).

The ungrammaticality of argument topicalization in (16a,b) is usually ascribed to an intervention effect: the fronted topicalized constituent *this article* blocks fronting of the wh-constituent. The example in (16a) illustrates this for an interrogative wh-clause, while (16b) displays a relative wh-clause.

- (16) a. * I couldn't recall which student [this article] would present *t* in my class.
 b. * I still remember the student who [this article] presented *t* in my class.

As (17) illustrates, VP topicalization within such a wh-clause is unacceptable as well: (17a) illustrates this for wh-interrogatives and (17b) for relatives.

- (17) a. * I knew that one student presented this article in my class but I can't recall now [which of the students [present this article] did *t*].
 b. * I know that one student presented this article in my class but I can't recall the student [who [present this article] did *t*].

Contrary to VP topicalization, ellipsis of the VP is allowed in both wh-interrogatives and wh-relatives (as was shown above as well):

- (18) a. I knew that some students presented this article in my class but I couldn't recall [which of the students didn't Ø].
 b. I know that some students presented this article in my class but I can't recall the students [who didn't Ø].

Such examples can be multiplied. Emonds (1976) cites the VP fronting in (19a) as unacceptable. The corresponding VPE pattern in (19b) is fully licit:

- (19) a. * John hoped that Mary would find his hat, but I wonder how [find it] she ever could *t*. (Emonds 1976: 32 (his (29))
 b. John hoped that Mary would find his hat, but I wonder how she ever could \emptyset .

The examples of VPE in (20), taken from Johnson (2001, his (61a,b) and (72)), illustrate the same point. They too show that VPE is unproblematic in a *wh*-interrogative and a *wh*-relative:

- (20) a. I know which book Max read, and which book Oscar didn't \emptyset .
 b. This is the book of which Bill approves, and this is the one of which he doesn't \emptyset . (Fiengo & May (1994), (99a,c): 229)
 c. Dulles suspected everyone who Angleton did \emptyset .

It is impossible to create an acceptable VP topicalization source for these examples. We illustrate this in (21) for the example in (20a):

- (21) a. * I know which book Max read, and which book [read t_{wh}] Oscar didn't *t*.
 b. * I know which book Max read, and [read t_{wh}] which book Oscar didn't *t*.

The sentence in (22a), cited as marginally acceptable by Johnson (2001: his (116)), in which an active VP (*fired Max*) serves as an antecedent for an elided passive one, does not have a plausible VP-topicalization source either: clefting is incompatible with VP topicalization, cf. (22b).

- (22) a. ? John fired Max, although it was Bill who should have been \emptyset . (Fiengo & May 1994: 203, note 10)
 b. * John fired Max, although it was Bill who [fired] should have been *t*.

As a final example, English VP topicalization is also unacceptable in the context of argument fronting, as shown by the following. Plausibly this is also due to an intervention effect (cf. Emonds 1976; Haegeman 2010a,b; Haegeman and Ürögdi 2010a,b):¹⁶

- (23) a. * and [increase in value] the old house he was sure would *t*. (Emonds 2004: 95)
 b. * and the old house [increase in value] he was sure would *t*. (Emonds 2004: 95)

Once again, VPE is allowed in this context:

- (24) She doubted whether the new house might increase in value, but [the old house] she was sure would Ø.

3.2.2 Topicalization Inside an Adverbial Clause

(VP) topicalization is usually considered a root transformation (Emonds 1970, 1976, 2004) or main clause phenomenon (Hooper and Thompson 1973), from now on MCP. Various proposals have been put forward to account for the constraints on such phenomena, which we will not go into here, but there seems to be agreement that in English, MCP are banned from occurring inside temporal adverbial clauses (cf. Hooper and Thompson 1973: 496, their (251-255); Emonds 1970, 1976, 2004; Heycock 2006; and Haegeman 2006, 2010a,b for discussion and accounts). This is illustrated in (25) for argument topicalization – which is also an MCP – and in (26) for VP topicalization:

- (25) a. * After [this baker] I had discovered *t*, I never have gone anywhere else.
 b. * Before [this baker] I had discovered *t*, I always ate toast.
 c. * When [this baker] I discovered *t*, I was thrilled.
 d. * As soon as [this baker] I had discovered *t*, I never have gone elsewhere.
- (26) Mary wanted to move to London
 a. and [move to London] she did *t*.
 b. * and after [move to London] she did *t*, her life changed entirely.
 c. * Before [move to London] she did *t*, she was totally demotivated.
 d. * and when [move to London] she did *t*, her life changed entirely.
 e. * and as soon as [move to London] she did *t*, her life changed entirely.

While VP topicalization is unacceptable in such adverbial clauses, VP ellipsis is perfectly acceptable:

- (27) Mary wanted to move to London
- a. and eventually she did Ø.
 - b. and after she did Ø, her life changed entirely.
 - c. Before she did Ø, she had been totally demotivated.
 - d. and when she did Ø, her life changed entirely.
 - e. and as soon as she did Ø, her life changed entirely.

VP topicalization is also illicit in purpose clauses, while VPE is once again allowed:

- (28) a. * John intends to make a table, and I'll get the materials so that [make one] he can *t*. (Emonds 1976: 32, his (29))
- b. John intends to make a table, and I'll get the materials so that he can Ø.

Johnson (2001: 468) himself provides (29a), his (103a), which illustrates the acceptability of VPE in an adverbial clause which is incompatible with MCP. As shown by (29b) and (29c), it is impossible to devise a VP topicalization source for this example: in (29b) we front the VP inside the adverbial clause, in (29c) we extract it to the matrix clause, and in both cases the result is unacceptable.¹⁷

- (29) a. Rusty₁ talked about himself₁ only after Holly₂ did Ø.
- b. * Rusty talked about himself only after [talk about herself] Holly did *t*.
- c. * [Talk about herself] Rusty talked about himself only after Holly did *t*.

The examples in (30) and (31), adapted from Johnson's (2001) (110) and (112), illustrate the same point: VPE is possible in a *before* clause and in a *when* clause (cf. (30)), contexts in which VP topicalization is unacceptable, cf. (31):

- (30) a. Fred talked about the war before Rusty did Ø.
- b. David Begelman laughs very often, and when he does Ø, his eyes crinkle at you the way Lady Brett's did in the *The Sun Also Rises*.
- (31) a. * Fred talked about the war before [talk about the war] Rusty did *t*.
- b. * [Talk about the war] Fred talked about the war before Rusty did *t*.

- c. * David Begelman laughs very often, and when [laugh] he does *t*, his eyes crinkle at you.
- d. * David Begelman laughs very often, and [laugh] when he does *t*, his eyes crinkle at you.

It can be argued (Haegeman 2010a,b; Haegeman and Ürögdi 2010a,b) that adverbial clauses are derived by operator movement to the left periphery. Under this analysis, the incompatibility with (VP) topicalization will be ascribed to intervention and in fact follows from the incompatibility of (VP) topicalization with wh-movement discussed in section 3.2.1. This point is, however, tangential to our discussion.

3.2.3 Factive Complements

A third kind of clause in which VP topicalization cannot occur, is the complement clause of a factive verb. It is well-known that such clauses resist MCP (see Haegeman and Ürögdi 2010a,b for recent discussion). Example (32a) from Emonds (1976: 32) shows that the ban extends to VP topicalization. Once again VPE is unproblematic (32b):

- (32) a. * John intended to make a table, and we were glad that [make one] he did *t*.¹⁸
- b. John intended to make a table, and we were glad that he did Ø.

Haegeman and Ürögdi (2010a,b) propose that complements of factives be derived by operator movement to the left periphery. Under this analysis the incompatibility with (VP) topicalization is again due to intervention and these data are a further illustration of the effect of wh-movement in section 3.2.1. As before, this point is tangential to our discussion.

3.2.4. Subject Clauses

Many authors have observed that subject clauses resist MCP.¹⁹ VP topicalization is equally unacceptable (33b), but VP ellipsis remains fully acceptable in subject clauses (34):

- (33) a. * That [Mary], our antics would upset *t*, I didn't expect.
 (Alrenga 2005: 179, his (15d))
 b. * I thought he might invite them but that [invite them] he actually *t* did surprised me.

(34) I thought he might invite them, but that he actually did \emptyset surprised me.

3.3 Some Additional Contexts

Sections 3.1 and 3.2 have illustrated a number of contexts in which VP topicalization is known to be excluded in English, while VPE remains freely available. In this section we provide some more environments which illustrate the same contrast. Our aim is not to provide an exhaustive list of such contexts, but merely to show that VPE is not subject to the constraints displayed by VP topicalization.

3.3.1 Yes/No Questions

Just like the argument fronting in (35a), VP topicalization is degraded in root *yes/no* questions with subject auxiliary inversion (35b). VPE, on the other hand, is fine in the same context (36), given the appropriate discourse environment:²⁰

- (35) a. * [That book about shrimp], did you actually read *t*? (Sobin 2003: 194)
 b. * [Passed his exams], has he *t*?²¹

(36) “He found out today whether he has passed his exams.” – “And? Has he \emptyset ?”

3.3.2 Imperative Clauses

Although the judgments are admittedly not as sharp, for many speakers argument fronting is degraded in the context of imperatives (cf. (37a), for discussion see Jensen 2007, Postma and

Van der Wurff 2007) and so is VP topicalization, as is illustrated in (37b). The VPE example in (38), on the other hand, remains fully acceptable:

- (37) a. * [Your essay], leave *t* in my pigeon hole this afternoon.
 b. * You may want to paint the bedroom yellow but I tell you: ‘[Paint the bedroom yellow], don’t *t*.’

- (38) “I’m going to paint the bedroom yellow!” - “Oh no! Please don’t Ø!”

3.3.3 Null Complementizer-Clauses

A further area in which topicalization is unacceptable for many speakers is when a complement clause lacks an overt complementizer (39a). Once again, VP topicalization is also unacceptable (39b), but VP ellipsis is not (40).

- (39) a. John believes *(that) [Bill], Mary doesn’t like *t*. (Nakajima 1995: 147, (8))
 b. John believes *(that) [talk to Mary] you shouldn’t *t*.

- (40) John believes (that) you shouldn’t Ø.

3.3.4 Subject Deletion in Finite Clauses

In finite clauses, subject ellipsis is available in two contexts. The first, illustrated in (41a), concerns coordinated clauses. As shown by (41b), argument fronting in the second conjunct of a finite coordinated clause is incompatible with subject ellipsis (see Wilder 1994 for discussion and an analysis, see also te Velde 2005 on coordination).

- (41) a. The Prime minister met the striking teachers last week and ___ will meet the administrative staff tomorrow.
 b. * The Prime minister met the striking teachers last week and [the administrative staff] ___ will meet *t* tomorrow.

Unsurprisingly by now, VP topicalization is also incompatible with subject deletion in the second conjunct (42a,b). VPE, on the other hand, remains available (42c):

- (42) a. John hasn't applied for the job at this point but [apply for it] he should *t* any day now.
 b. * John hasn't applied for the job at this point but [apply for it] ___ should *t* any day now.
 c. John hasn't applied for the job at this point but ___ should Ø any day now.

Subject deletion is also available in specific abbreviated registers such as diary writing, as illustrated by the attested examples in (43). See Thrasher (1977); Haegeman (1997, 1999, 2002, 2008) and Haegeman and Ihsane (1999, 2002) for extensive discussion and analyses.

- (43) a. ___ Finished, almost, story of Shadow. (*Diary of Sylvia Plath*, 287)
 b. ___ Have done 110 pages. (*Diary of Virginia Woolf*, p. 33; 11 November)
 c. Origo rather contorted: ___ says Italy is blind red hot devoted patriotic; ___ has thrown her wedding ring into the cauldron too. ___ Anticipates a long war...
 (*Diary of Virginia Woolf*, p. 6, 10 January 1936)

When the subject is preceded by a fronted argument, as in (44) for (43a), no ellipsis is possible in English: such examples are unattested and native speakers reject them. See also Thrasher (1977) for the same observation.

- (44) * Story of Shadow, ___ finished last night.

In the same context VP topicalization is unacceptable as well, cf. (45a,b). VPE, however, remains fully licit, as expected.

- (45) a. ___ Refused to talk to the students.
 b. * Talk to the students, ___ refused to *t*.²²
 c. Jim asked her to talk to the students again. ___ Didn't want to Ø.

3.3.5 Conclusion

This section has provided some additional contexts in English which disallow VP topicalization but allow for VPE. We conclude that in addition to the problems signaled by Johnson (2001) himself and pointed out at the end of section 2, a range of other issues arise if one amalgamates the derivation of VPE with that of VP topicalization: VP ellipsis cannot be derived by fronting the VP first.

4. Speculations

We have shown that the syntactic contexts licensing VPE are much wider than those licensing VP topicalization, which presents a challenge to Johnson's (2001) proposed movement analysis. It could be objected that, in fact, the violations incurred by VP topicalization are somehow undone or repaired as the result of VPE (see Authier 2011: 212 for an analysis of French along such lines). However, this type of approach potentially destroys the symmetry between VP topicalization and VPE which Johnson underlines and it would also undermine Johnson's own argumentation (outlined in section 2) concerning the restrictions on VPE in infinitival clauses. If VPE repairs/undoes the problems raised for VP topicalization, then the contrast in acceptability of VPE in (5) and (6) is unexpected. An account in which VPE repairs problems of extraction needs thus to be able to distinguish cases in which ellipsis does repair illicit patterns and those which it does not (see also note 8).

It is clear that VPE and VP topicalization do have some properties in common (see also Kim 2003, in a different theoretical framework), but it is not obvious that movement of the VP to the clausal CP is at the basis of VPE. We do not want to provide an full account for these similarities here, but we will sketch some possible ways of deriving the patterns. As a baseline, whichever account is elaborated will have to (i) bring out the commonality of the syntactic licensing between VP topicalization and VPE, while (ii) ensuring that the asymmetry in distribution between the two phenomena can be accounted for.

4.1. Cliticization to INFL

One way of preserving the movement analysis of VPE while avoiding the problems encountered by a VP topicalization analysis is to assume that “elided VPs are null clitics, which have moved to adjoin to the Infl associated with the licensing Aux. As a consequence, VP Ellipsis invokes a trace in the position where we would expect to find the missing VP, thereby causing the Empty Category Principle’s invocation.” (Johnson 2001: 445).

An approach along these lines has been proposed by Lobeck (1999). She argues that VP ellipsis is licensed by a tensed auxiliary in T (as, for instance, also proposed in Lobeck 1995). The VP ellipsis site under her analysis is a null proform *pro*, which is minimal and maximal at the same time (following Chomsky 1995: 402-403) and this null VP *pro* has to move to [Spec, TP], assimilating it to clitics in French under her approach (Lobeck 1999: 117). Similarly, cliticization accounts of ellipsis are also found in Lightfoot (2006: 111-112) and Kim (2006). We do not go into the details of the different implementations here.

Under one interpretation of the cliticization view of VPE, i.e., if clitics leave traces, the ellipsis site is a copy/trace, hence the commonality with VP movement is expected. Differently from Johnson’s proposal, however, the cliticization accounts do not lead to the prediction that VPE should be subject to the selfsame distributional restrictions as VP topicalization: for one thing, the latter targets the left periphery of the clause, while the former does not. We also observe that the contexts which are incompatible with VP topicalization listed above remain fully compatible with cliticization in Romance. To show this, we provide some examples from French. Firstly, (46) illustrates cliticization in wh-movement contexts: (46a) illustrates interrogatives and (46b) relatives. Cliticization is also compatible with clefting (cf. (46c)) and with clitic left dislocation, as in (46d):

- (46) a. Je ne sais pas qui l’ a dit.
 I ne know not who CL have-3SG say-PART
 ‘I don’t know who told me that.’
- b. Je ne connais pas l’ étudiant qui l’ a dit.
 I ne know not the student who CL have-3SG say-PART
 ‘I don’t know the student who told me that.’
- c. C’est cet étudiant qui l’ a dit.
 it is this student who it have-3SG say-PART
 ‘It’s this student who told me that.’
- d. A Jean, je ne le lui conseille pas.

to John I *ne* CL CL advise not
 ‘To John, I would not recommend it.’

Moreover, French clitic placement is not a main clause phenomenon, so it is freely available in adverbial clauses and in the complement of factive verbs:

- (47) a. Quand il l’ a dit, j’ étais furieuse.
 when he CL have-3SG say-part I was furious-FS
 ‘When he told me that I was furious.’
- b. Je regrette que je ne l’ aie pas vu.
 I regret that I *ne* CL have-SUBJ-1SG not seen
 ‘I regret that I haven’t seen it.’

Similarly, *yes/no* questions and imperatives pose no problem for cliticization:

- (48) a. Le veux- tu?
 CL want-2SG you
 ‘Do you want it?’
- b. Dis- le !
 say-IMP CL
 ‘Tell me!’

Finally, cliticization is unproblematic in the second conjunct of coordinated clauses in which the subject has been deleted: (49a) illustrates subject ellipsis in French, while (49b) shows that cliticization remains available in that context. Cliticization is also compatible with diary style null subjects in French, (49c) is attested from Haegeman (1996):

- (49) a. Le Premier ministre a interrogé les instituteurs en grève hier
 the Prime minister has interview-PART the teachers on strike yesterday
 et __ rencontrera les professeurs la semaine prochaine.
 and __ meet-FUT-3SG the professors the week next
 ‘The Prime minister met the striking teachers yesterday and is meeting the professors next week.’

- b. Le Premier ministre a interrogé les instituteurs en grève hier
 the Prime minister has interview-PART the teachers on strike yesterday
 et __ les rencontrera aussi la semaine prochaine.
 and __ CL meet-FUT-3SG also the week next
 ‘The Prime minister met the striking teachers yesterday and is meeting them
 also next week.’
- c. __ Me dit que l’ architecte Perret est désireux de passer un
 __ CL says that the architect Perret is desirous of spend a
 moment avec moi.
 moment with me
 ‘Says that the architect Perret wishes to spend a moment with me.’
 (Paul Léautaud, *Journal particulier*, p. 44: 6.2.133, from Haegeman 1996, her
 (5b)).

The property that crucially distinguishes cliticization (in French) from argument fronting and VP topicalization in English, is that cliticization does not target the clausal left periphery and hence can freely apply regardless of the properties of the CP layer.

One obvious disadvantage of the cliticization approach, however, is that it takes the VP ellipsis site to be a null clitic, i.e., a proform.²³ Because extraction from a VPE site is possible in English (for discussion, see Schuyler 2002, for instance), VPE has been analyzed as involving deletion of a full-fledged syntactic verb phrase (cf. Johnson 2001; Merchant 2001, 2008; Aelbrecht 2010a). A proform analysis such as in Lobeck (1995, 1999) will not easily capture the extraction facts.²⁴

4.2. VP Movement to a Low Periphery?

In this section we speculate about a different take on the cliticization analysis of VPE in which we pursue one particular approach to the syntax of cliticization. In some analyses, cliticization is taken to be derived by a two-step procedure: first the constituent that is to be cliticized moves leftward as a maximal projection (presumably a DP) to a specifier position in a low functional domain (SpecAgrP, or Spec,PartP), and then the head of the moved XP (presumably the D head) undergoes head movement to the INFL position.

This two-step derivation of cliticization was invoked among others to account for the agreement between the past participle and the object clitic (Kayne 1989; Rizzi 2000; Belletti 2001b. For problems, see Rocquet 2010). Consider (50): when the complement of *écrit* ‘written’ is postverbal (50a,c), the participle has the non-agreeing form. When the object is cliticized (50b,d), the participle agrees with the clitic (50b,d): the clitic on the finite auxiliary *ai* ‘have’ triggers agreement on the participle: *écrite* ‘written’ is feminine singular, whereas *écrites* is feminine plural. The agreement is related to the movement of the clitic: in (50a,c), in which there is no movement, the participle appears as the unmarked form *écrit* in spite of it having a feminine complement. A schematic derivation is given in (50e): The clitic on the finite auxiliary in (50b,d) originates as a DP complement in the VP which first attains a specifier-head relation with the participial head hosting the participle, and this specifier-head relation triggers the agreement between clitic and participle.

- (50) a. J’ ai écrit la lettre.
I have-1SG written-PART the-FEM-SG letter
- b. Je l’ ai écrite.
I it have-1SG written-PART-FEM-SG
‘I have written it.’
- c. J’ ai écrit les lettres.
I have-1SG written-PART the-PL letters
- d. Je les ai écrites.
I them have-1SG written-PART-FEM-PL
‘I have written them.’
- e. [PartP [DP les] [_{part} écrit es] t_{DP}]



In a slight adaptation of these approaches to cliticization, one might reinterpret the proposed intermediate landing site of the first step of the movement in (50e) as the specifier of a TopP in a lower vP periphery. Movement to the low periphery has been proposed, among others, by Jayaseelan (2000, 2001), Belletti (2001a, 2004, 2009), Butler (2004), Lopez and Winkler (2004), Konietzko and Winkler (2010), Molnár and Winkler (2010).

The movement analysis of VPE could then be reconciled with the intuition that VPE is similar to cliticization if one were to assume that VPE shares with cliticization the first step of the movement, illustrated in (50e). One might reinterpret this approach to mean that VPE is

derived via VP movement to a discourse related vP periphery, rather than the clausal left periphery. This proposal would exploit movement to the low periphery along the lines of Johnson's (1996, 2009) proposal for gapping. If the latter movement targets a lower TopP, the derivation would syntactically encode the discourse-givenness of the deleted VP, along the lines of recent cartographic work (Belletti 2001a, 2004, 2009). One might thus propose that VPE *is* VP topicalization, in agreement with Johnson (2001), but that contrary to his proposal, the relevant topicalization does not target the 'high' CP periphery, but rather a 'low' vP-related periphery.²⁵

VP movement to the low periphery has been proposed for English in different contexts. In an anti-symmetric perspective (Kayne 1994, Cinque 1999) it has, for instance, been proposed that the variation in position of the adjunct *recently* and the VP in (51) is derived through leftward VP movement (see also Cinque 1999, 2004; Schweikert 2005; Belletti and Rizzi to appear; among others):

- (51) a. John has recently [joined the department].
 b. John has [joined the department] recently [~~joined the department~~].

Adopting and adapting Johnson (2001)'s approach, VPE could be analyzed as involving (low) VP movement, followed by deletion. See also Kayne (2005: 296) for similar suggestions.

- (51) c. John has [~~joined the department~~] recently [~~joined the department~~].

The kind of VP movement to the lower periphery illustrated in English (51b) does not interfere with wh-movement (52a) and is generally available in all clause types (52b,c):

- (52) a. The student who finished this text recently...
 b. The fact that he finished this text only recently....
 c. When he contacted me more recently,...
 d. That he contacted me recently was quite a surprise.
 e. I believe (that) he contacted her recently.

However, for this approach to work, the contexts in which low VP movement is licit should be the same as those of VP topicalization to the left periphery. At first sight, this is not the

case and the parallelisms captured by Johnson's account between VP topicalization and VPE are lost. Recall from (2) and (4) that VPE and VP topicalization are illicit in the absence of an auxiliary. As shown in (53b), VP movement across an adjunct is fine without an auxiliary. This means that if 'middlefield' VP movement licenses VPE, it would be a necessary but not a sufficient licensing condition.

- (53) a. John recently [joined the department].
 b. John [joined the department] recently [~~joined the department~~].

The same conclusion can be drawn on the basis of the data in (54): while middlefield VP movement would be required to derive the sentence-final position of the adjuncts in the infinitival subject clauses, VPE in the infinitival subject clauses would still not be licensed.²⁶

- (54) a. [To brush too frequently] can cause gum damage.
 b. [To eat rapidly] is dangerous.

At this point it is not clear to us that rephrasing Johnson's proposal in terms of low VP movement analysis will be able to rescue the movement account of VPE in a straightforward way.²⁷ While the locality problems are solved, the problems with licensing re-emerge. We intend to explore this avenue in future work.

4.3 VP Ellipsis and AGREE

An alternative account for capturing the similarity between VPE and VP topicalization would be to dispense with a movement account of VPE as such and to return to the intuition initially captured by the Empty Category Principle as implemented in Rizzi (1986). An ECP account for ellipsis, and in particular for VPE, was developed by Lobeck (1995)²⁸ and by Zagana (1988a,b). According to Rizzi (1986) the same syntactic constraints apply to all null categories, movement traces, *pro* and ellipsis sites alike. Indeed, assuming that (i) traces are lower copies that are not spelt out, and (ii) VP ellipsis is analyzed as deletion of the VP, the unpronounced lower copy of a moved VP is in fact a VP ellipsis site. Such an account turns around Johnson's (2001) proposal: instead of regarding ellipsis sites as traces of movement,

movement traces are considered to be ellipsis sites. This hypothesis has recently been put forward by Aelbrecht (2010b), who argues that VP topicalization and VP ellipsis are syntactically licensed by the same mechanism.

Inspired by Merchant's (2001) analysis of ellipsis according to which ellipsis is triggered by the presence of an [E] feature, Aelbrecht (2010a) develops an account in which VPE is licensed by an AGREE relation between the [E] feature on an ellipsis licensing head and the head selecting the ellipsis site as its complement.²⁹ To express the commonality between VPE and VP topicalization, Aelbrecht (2010b) proposes that VP topicalization is licensed by this AGREE relation as well. The underlying intuition is that the same AGREE relation triggers non-pronunciation of either the original VP – in the case of ellipsis – or the lower copy of a moved VP – in the case of VP topicalization. Only in environments where the AGREE relation can be established, i.e., when there is a licensing auxiliary or infinitival *to*, can ellipsis or topicalization take place. The account thus captures the similarities between VPE and VP topicalization mentioned by Johnson (2001). The differences between the two phenomena are due to the fact that, unlike under Johnson's (2001) approach, VPE does not involve movement. Consequently, VPE is not restricted in the same way as VP topicalization, which does involve movement to the left periphery. For instance, intervention effects which are relevant for the movement component of VP topicalization will not be relevant for VPE. We refer to Aelbrecht (2010b) for full analysis.

5. Conclusion: VP Ellipsis is not VP Topicalization

The goal of our remark was to evaluate the VP topicalization derivation of VPE as proposed in Johnson (2001). We hope to have shown that, although it has its merits in capturing the similarities between VPE and VP topicalization, an analysis of VPE in terms of VP topicalization raises several problems. A central consideration in any account in terms of movement must be the observation that while VP topicalization targets the left periphery and as a consequence is subjected to various constraints on movement to the left periphery, VPE is not so restricted. Any syntactic derivation of VPE has to account for this asymmetry.

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¹ For the seminal discussion of VPE in *to* infinitives, see Lobeck (1995: 165-191). We have simplified Johnson's discussion somewhat for expository reasons. See also note 10 for more discussion.

² For discourse conditions on VP topicalization, see among others Ward 1988, 1990.

³ We represent the copy of movement by *t* for reasons of legibility.

⁴ Observe that while VP topicalization is out in (ia), VPE in the same context seems at first sight licit:

- (i) a. ?* *Eat rutabagas*, Holly made me *t*. (Johnson 2001: 444, his (18))
- b. Why did you eat those rutabagas? Holly made me.

In such examples VPE seems to be licensed by a lexical verb. A similar instance is given in (ii):

- (ii) a. ?* *Eat rutabagas*, he wouldn't let me.
- b. Why did you not eat the rutabagas? He wouldn't let me.

Thanks to Philip Miller (p.c.) for bringing these data to our attention. We have nothing to say about these cases here.

⁵ The match is not perfect, as admitted by Johnson (2001: 444) himself: What's left unmatched is the prohibition on ellipsis following an *ing* form, a prohibition that is not recapitulated in VP topicalization [see (i)], and the ability of a small clause to elide following *not*, an ability not shared by VP topicalization [see (ii)].

- (i) Madame Spanella claimed that...
- a. ? *discussed widely*, Holly is being *t*.

b. ? *discussed widely*, I remember Holly being *t*.

(ii) *Madame Spanella claimed that *intelligent*, I consider Holly not *t*.

See also Kim (2003: 278) and Authier (2011) for relevant discussion.

⁶ For Russian and Polish VPE Szczegielniak (2004) distinguishes ‘bare VPE’, which is derived by topicalization of a VP and is not available in English, from ‘non-bare VPE’, which is derived by in situ deletion of distressed material and is available in English. Since he assumes that VPE in English is not derived by VP topicalization, his findings are in line with our discussion. We have nothing to say about the possibility that ‘bare VPE’ in Russian and Polish is derived by VP topicalization.

⁷ Authier (2011) builds on Johnson’s proposal in his analysis of French modal ellipsis (i) and derives ellipsis of the complement of modal verbs by VP topicalization followed by PF deletion.

(i) Elle joue avec qui elle peut. (Authier 2011 : 177, his (3b))
 she play-3SG with who she can-3SG
 ‘She plays with whoever she can.’

For reasons of space we do not go into this point in detail here and we refer to his paper for a full discussion of the data.

In relation to his topicalization analysis of French modal ellipsis, Authier’s section 4.2 briefly addresses some of the intervention effects that we ourselves discuss in our own section 3.2 in relation to English. Using Bošković’s (2011) ‘Rescue by PF deletion’ Authier (2011: 212) proposes that the asymmetry between VPE and VP topicalization is accounted for if one assumes that an illicit fronting of the FP is rescued by ellipsis. Anticipating the discussion below, the Rescue by PF deletion approach hinges on syntactic intervention; such an approach is not at first sight easily applicable to the domains discussed in sections 3.3.3 (null

complementizer clauses) and 3.3.4 (subject deletion in finite clauses), which also display an asymmetry between VPE and VP fronting. For problems with a movement analysis of subject deletion see Haegeman (2008).

See Aelbrecht (2010a) for an alternative account of modal ellipsis (in Dutch) which does not necessitate a movement derivation.

⁸ Philip Miller (p.c) also points out that there may be variation in judgments. For him (5d), for instance is ‘fine’ and (5e) is not completely out.

⁹ As already shown in Lobeck (1995: 173, her (22a)), the negative counterpart would be acceptable:

- (i) Mary wants to try to get a raise, because not to [_{VP} e] would be silly.

See Lobeck (1995: 174), and also Johnson (2001: 447, (30)). Thanks to Philip Miller (p.c.) for drawing our attention to these data.

Johnson (2001: 475ff) suggests that the licensing ability of negation may be related to other environments in which negation can license ellipsis such as predicate ellipsis illustrated in (ii). For the difference between VPE and predicate ellipsis see also Lobeck (1995).

- (ii) Mag left, and *(not) Sally. (Johnson note 12, his (i) and (ii))

An anonymous reviewer points out that not only negation would render (5b) acceptable. Insertion of *for*+SUBJ also would also lead to an acceptable VPE sentence, cf. (iiia). The counterpart with VP fronting, on the other hand, remains unacceptable, whether this places the VP to the right ((iiib)) or to the left ((iiic)) of the complementizer *for*.

- (iii) a. For adults to play with guns is just stupid, but [_{CP} for kids to Ø] is downright dangerous.
- b. * For adults to play with guns is just stupid, but [_{CP} for [play with guns] kids to *t*] is downright dangerous.

-
- c. * For adults to play with guns is just stupid, but [_{CP} [play with guns] for kids to *t*] is downright dangerous.

The reviewer points out that the contrast between the VPE examples with negation or *for*+SUBJ and the ones without might be due not to a restriction on VPE itself but rather could be due to *to* being a [+aux] clitic which needs a host. Ellipsis in the subject clause would then only be possible if there is such a host present, i.e., in the presence of negation or the ECM subject (see Baker 1971 for more on the effects of stress on auxiliary behaviour and ellipsis; cf. also Zagana 1988a,b; Lobeck 1995; Johnson 2001 and Aelbrecht 2010a for more discussion of such an account).

¹⁰ Raposo himself discusses the difference between European Portuguese Topic Drop, which is island sensitive, and VPE, which is not. We refer to his paper for discussion.

¹¹ Examples (7c) and (7d) have the added problem that topicalization in a temporal adverbial clause is also excluded, see section 3.2.2 below.

¹² A relevant observation here is that in terms of Hooper and Thompson's (1973), VP topicalization patterns with Main Clause Phenomena (MCP), which are not available in what they call 'reduced clauses' (1973: 485), i.e., non-finite clauses which are incompatible with fronting operations such as topicalization:

- (i) a. * It bothers me that big cigar, for the mayor to smoke it.
 b. * That book for me to read would be impossible.

(Hooper and Thompson 1973: 485, their (155) and (156))

See Emonds (1970, 1976, 2004) for discussion of the syntax of such MCP or Root transformations as he labels them. See Haegeman (2010a,b) for recent discussion.

¹³ Kim (2003: 36) discusses the difference between the constituent which undergoes movement in VP fronting and that which is elided under VPE. He observes that while VPE is grammatical in (i), VP fronting is not, as shown in (ii):

- (i) Lee might have been taking heroin, and
 - a. Sandy might have been ____ too.
 - b. Sandy might have ____ too.
 - c. (?) Sandy might ____ too. (Kim 2003: 280 his (44)).
 - (ii) They swore that Lee might have been using heroin, and
 - a. using heroin he might have been ____!
 - b. * been using heroin he might have ____!
 - c. * have been using heroin he might ____!
- (Kim 2003: 278, his (36), citing Akmaijan *et al* 1979).

See Kim (2003) for additional discussion.

¹⁴ This is a simplification: weak islands may allow for topic fronting:

- (i) a. ? This paper, I wonder whether they will accept.
- b. ? Fix the car, I wonder whether he will. (Den Dikken 2006: 709)

Observe that the difference between strong and weak islands has no effect on VPE: VPE remains equally acceptable in both contexts, suggesting that the phenomenon does not interact with extraction.

- (ii) (They'll ask him to sign the contract.) I wonder whether he will Ø.

¹⁵ Sag (1976) also discusses a movement derivation of VP ellipsis and discards it in the light of the island insensitivity of VPE, in contrast to VP movement. The examples in (i) are taken from Sag (1976: 13) and serve to show that VPE can occur within an island.

- (i) a. John didn't hit a home run, but I know a woman who did _.

-
- b. That Betsy won the batting crown is not surprising, but that Peter didn't know she did _ is indeed surprising.

¹⁶ An anonymous reviewer points out another problem for an analysis according to which ellipsis is licensed through movement, namely cases where ellipsis is possible of a constituent that resists topicalization or displacement altogether. In English, for instance, TP ellipsis is quite an acceptable and widespread phenomenon: under Merchant's (2001) analysis, sluicing involves ellipsis of the TP in the complement of a *wh*-C head, cf. (ia).

However, English does not allow TPs to topicalize (cf. (ib)). Moreover *wh*-clauses resist topicalization as discussed in section 3.2.1, esp. text examples (16).

- (i) a. I have forgotten something, but I don't know what ~~I have forgotten~~.
 b. * [_{TP} He will come] he told me [_{CP} that [_{TP} ~~he will come~~]]

It is therefore highly implausible that sluicing as in (ia) can be derived through movement of the TP prior to deletion: topicalization of the TP itself is illicit, and even if the problem could be circumvented, the required topicalization of the TP *I have forgotten* inside the *what*-clause would be unacceptable (cf. text example (7)), and extraction out of the *what*-clause will lead to an island violation (cf. section 3.1). Johnson (2001) himself already acknowledges that extending the topicalization approach to other types of ellipsis, such as NP ellipsis or sluicing, poses a challenge, and he mentions Saito & Murasugi's (1999) attempt to solve this problem (see also Aelbrecht 2010b).

¹⁷ Johnson uses text example (29a) for the discussion of binding possibilities. As shown by the grammaticality of (i), this point is tangential to our discussion:

- (i) Rusty started the linguistics course only after Holly did Ø.

¹⁸ Thanks for an anonymous reviewer for help with these data.

¹⁹ There actually is a debate about whether subject clauses exist. We do not go into this issue here, which is tangential to our discussion. See Alrenga's (2005) discussion for a survey of the arguments and also Davies and Dubinsky (1999, 2000).

²⁰ Observe that if *yes/no* questions involve movement of a question operator to the left periphery (Larson 1985) then these cases would fall under the patterns discussed in 3.2.1.

²¹ Note that this example has an acceptable reading in which *has he* is the tag to a sentence with null subject and auxiliary, cf. (i). This reading is not relevant to the discussion.

- (i) (He has) passed his exams, has he?

²² As remarked by Peter Matthews (p.c.), (45b) is possible if the fronted VP is reinterpreted as an independent utterance. But this only goes to confirm the observation that (i) be an example of VPE:

- (i) Talk to the students? ___ Refuses to Ø.

²³ This was already the position of Lobeck (1995), who takes the ellipsis site to be a null pronominal.

²⁴ It might be tempting to try to assimilate the derivation of VPE to that of CLLD in French (see (ia)), which implicates a constituent in the left periphery. However, this is not the right direction to take. Though French CLLD does have a wider distribution than argument fronting in English (Haegeman 2006, 2010a,b) and is also available, for instance, in imperatives (cf. (ib)), it is degraded with subject ellipsis in abbreviated registers (cf. (ic)) and incompatible with subject ellipsis in coordination (cf. (id)):

- (i) a. Ce livre- ci, je ne le veux pas.
 this book here I ne CL want-1sg not
 ‘This book, I don’t want.’
 b. Ce livre- ci, ne l’ achète pas.

this book here, *ne* CL buy not

‘Don’t buy this book here!’

c. ? Rencontre avec mes parents.

meeting with my parents

Ma mère, l’ ai trouvée triste.

my mother, her have found-FSG sad-FSG.

‘Meeting with my parents. Found my mother sad.’

e. * Le Premier ministre a interrogé les instituteurs en grève

the prime minister has interview-PART the teachers on strike

hier et les professeurs, __ les rencontrera la semaine

yesterday and the professors them meet-FUT-3SG the week

prochaine.

next

‘The Prime minister met the striking teachers yesterday and is meeting the university professors next week.’

²⁵ Depending on the precise articulation of the functional domains of the clause, which are not fully explicit in the paper, Lobeck’s (1999) proposal that VPE involves movement to SpecTP might also be reinterpreted in terms of such VP movement to the middlefield.

²⁶ This point was brought to our attention by an anonymous reviewer.

²⁷ Funakoshi (to appear) combines Johnson’s proposal with the suggestion made in our paper and develops an account of ellipsis involving VP fronting either to SpecCP or SpecvP. Unfortunately, in the version of the paper we have access to, he does not address the specific problems of implementation which we raise.

²⁸ As mentioned, Lobeck (1995) assumes that the deletion site is a null proform, but since the ECP applies to both traces and proforms, her approach could be reinterpreted in terms of the deletion account sketched here.

²⁹ The AGREE relation between heads could be seen as replacing the head government relation.